

Fig. 1 Crystal packing of 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A dihydrate (the structure is disclosed in Cambridge Structural Database under the code GEGJAD).

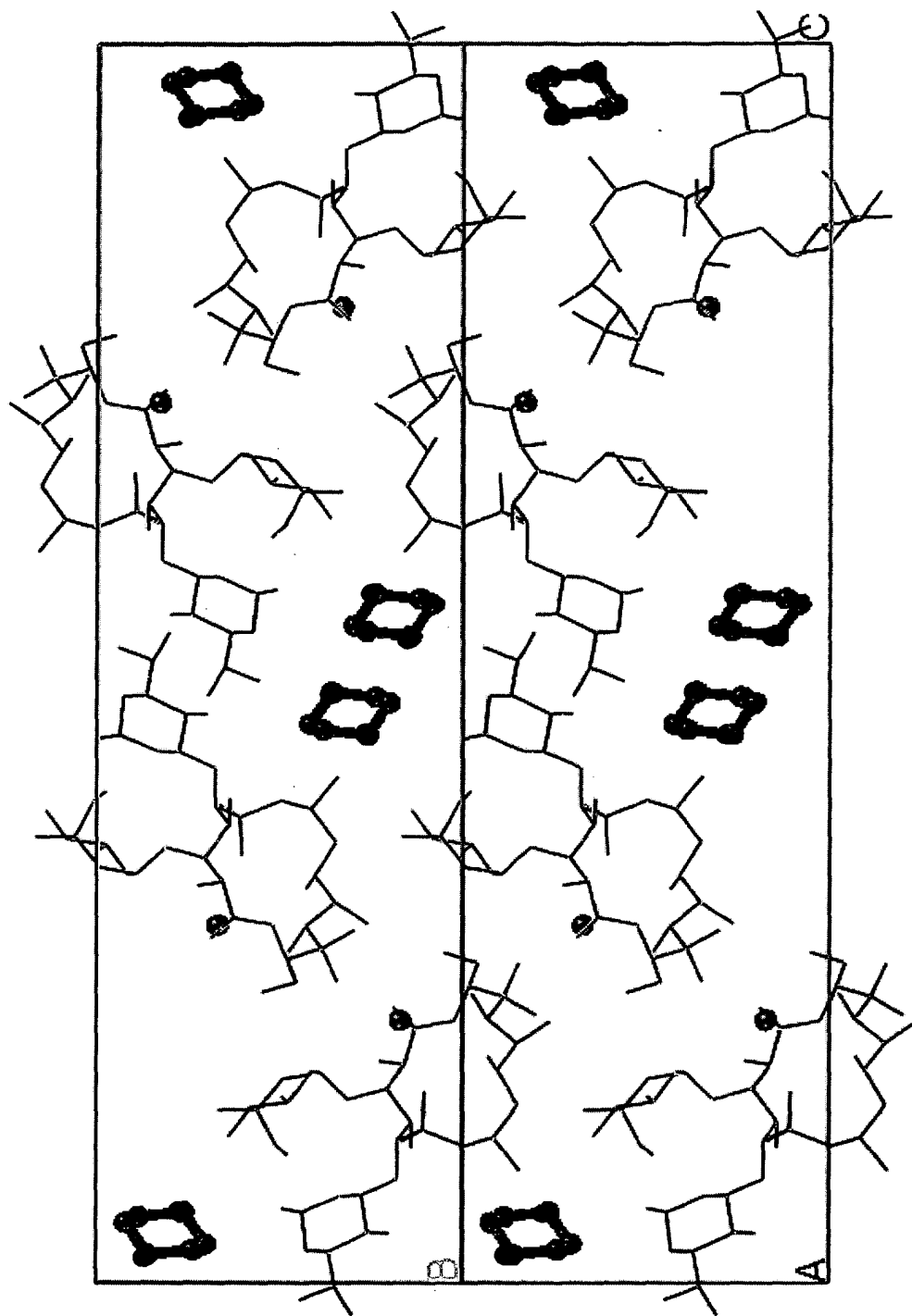


Fig. 2 Crystal packing of a novel orthorhombic isostructural pseudopolymorph of 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A of the general formula I (1a: S = 1,4-dioxane).

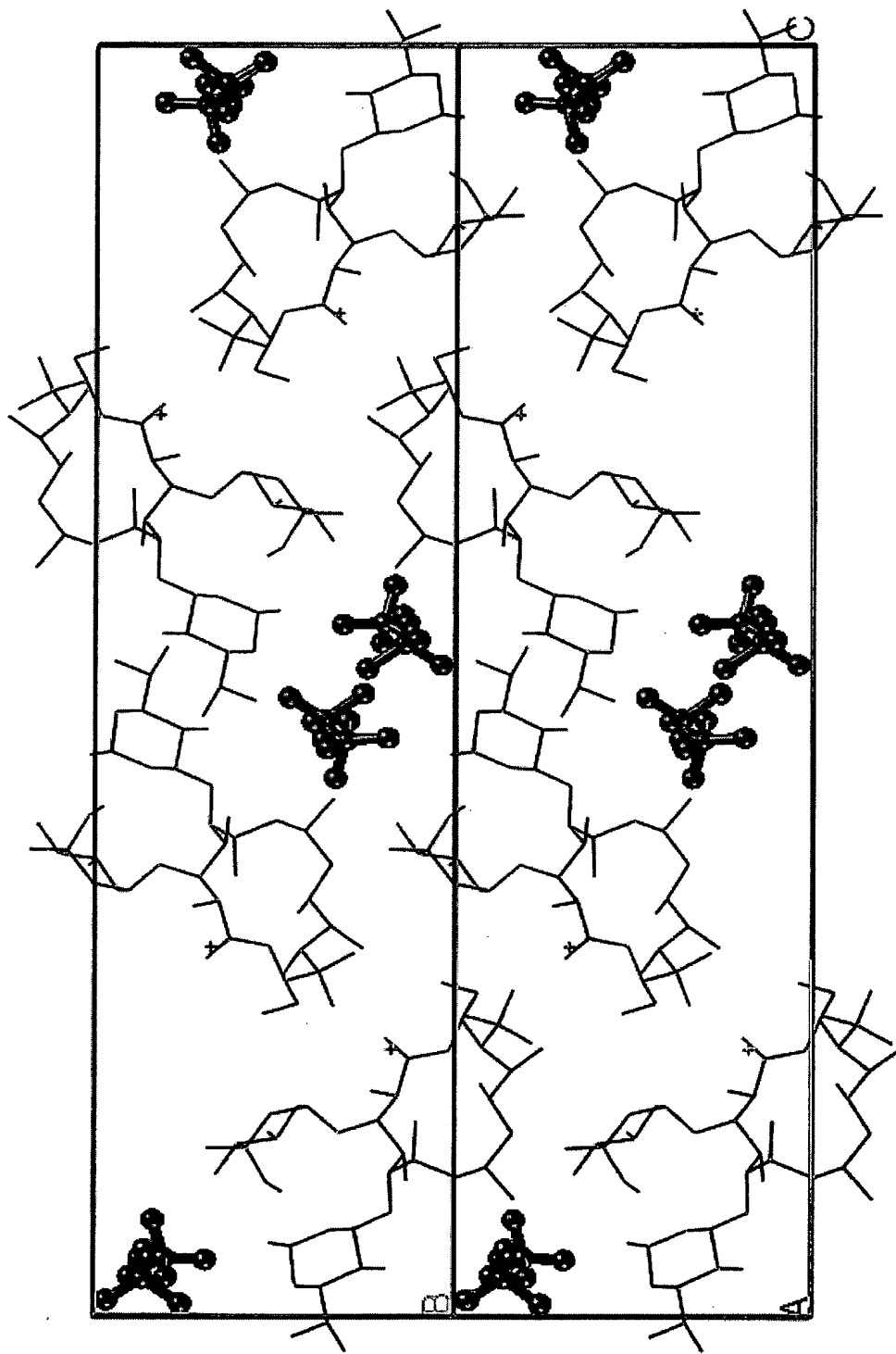


Fig. 3 Crystal packing of a novel orthorhombic isostructural pseudopolymorph of 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A of the general formula I (Ib: S = *tert*-butanol).

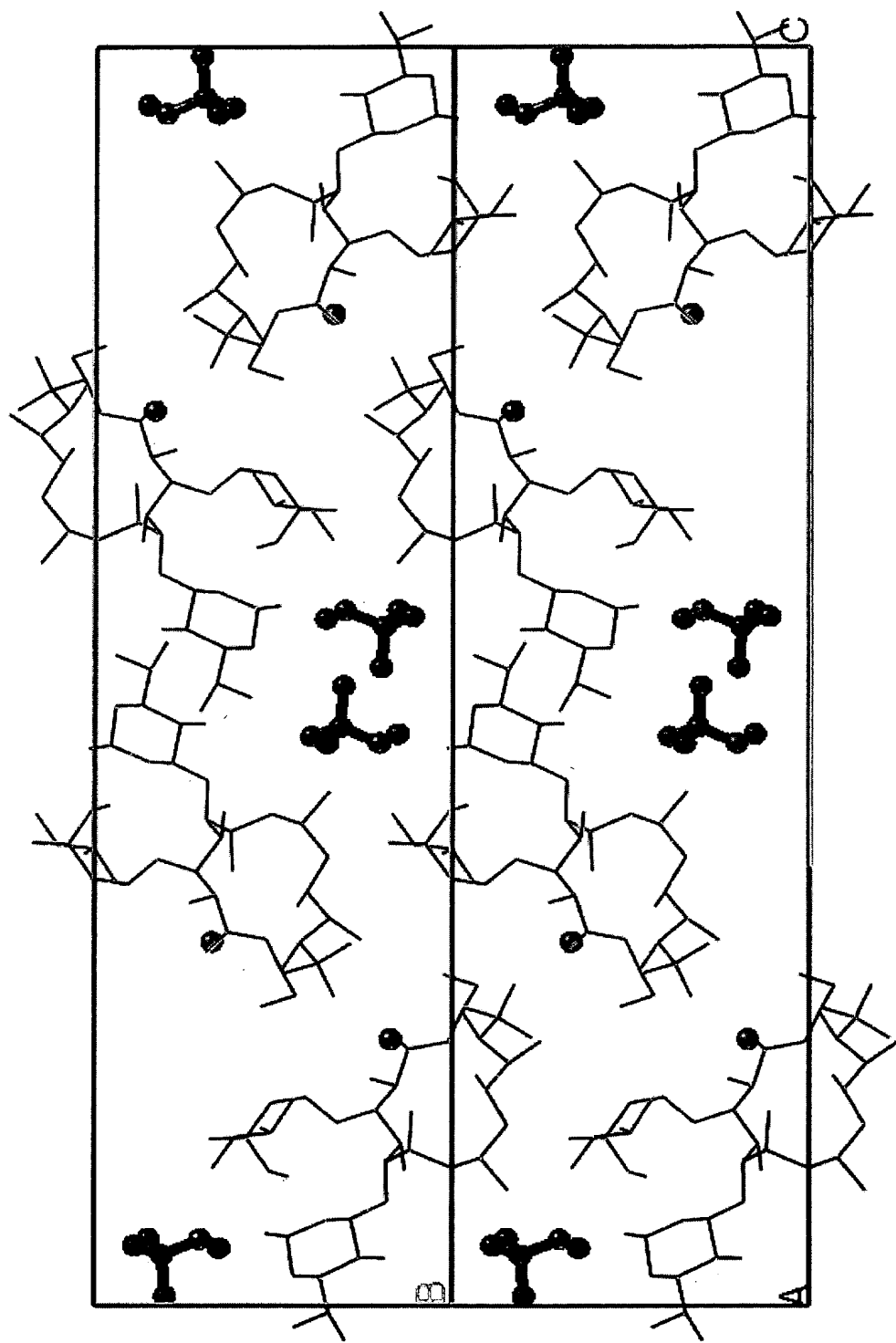


Fig. 4 Crystal packing of a novel orthorhombic isostructural pseudopolymorph of 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A of the general formula I (1c: S = methyl *tert*-butyl ether).

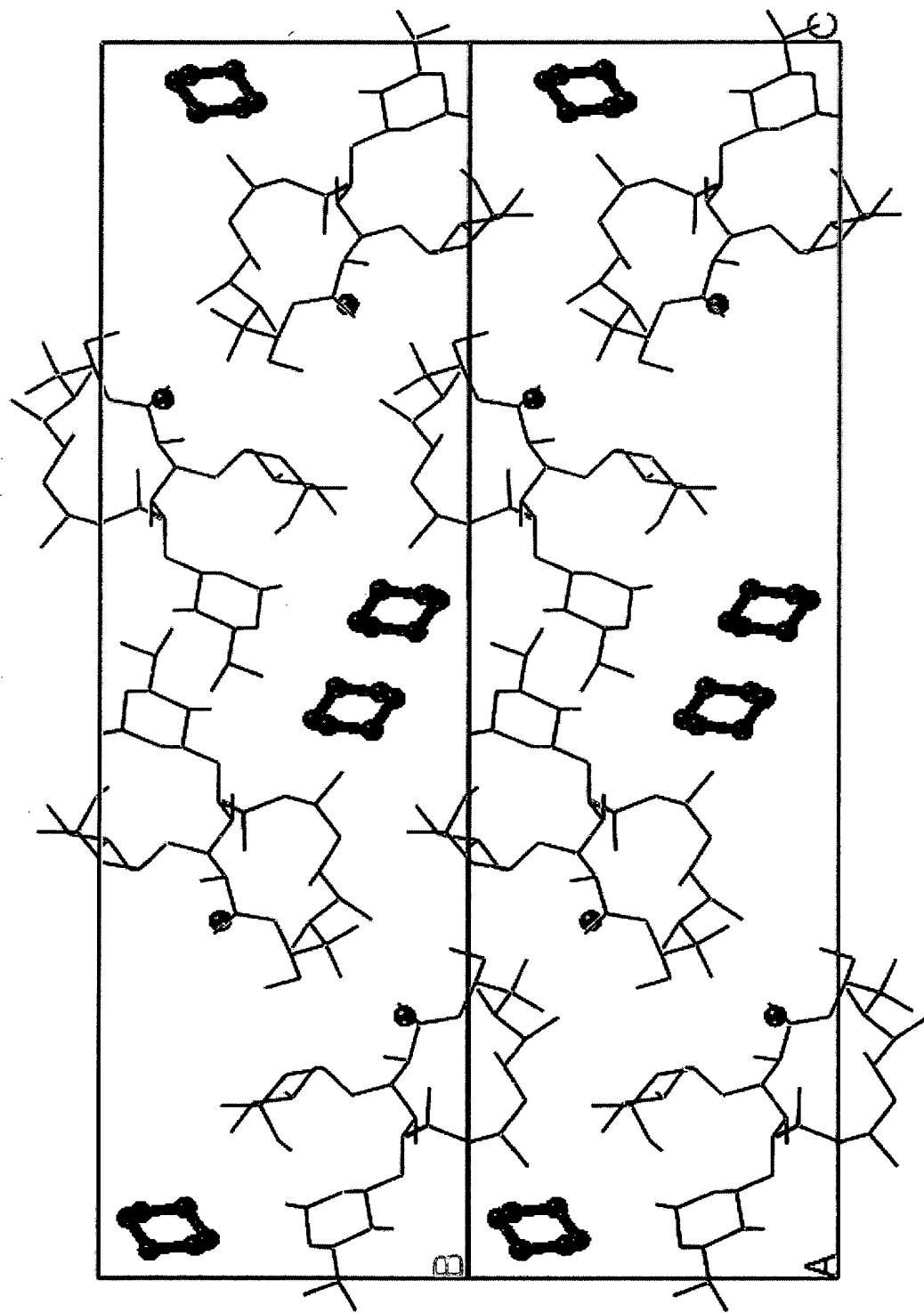


Fig. 5 Crystal packing of a novel orthorhombic isostructural pseudopolymorph of 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A of the general formula I (Id: S = cyclohexane).

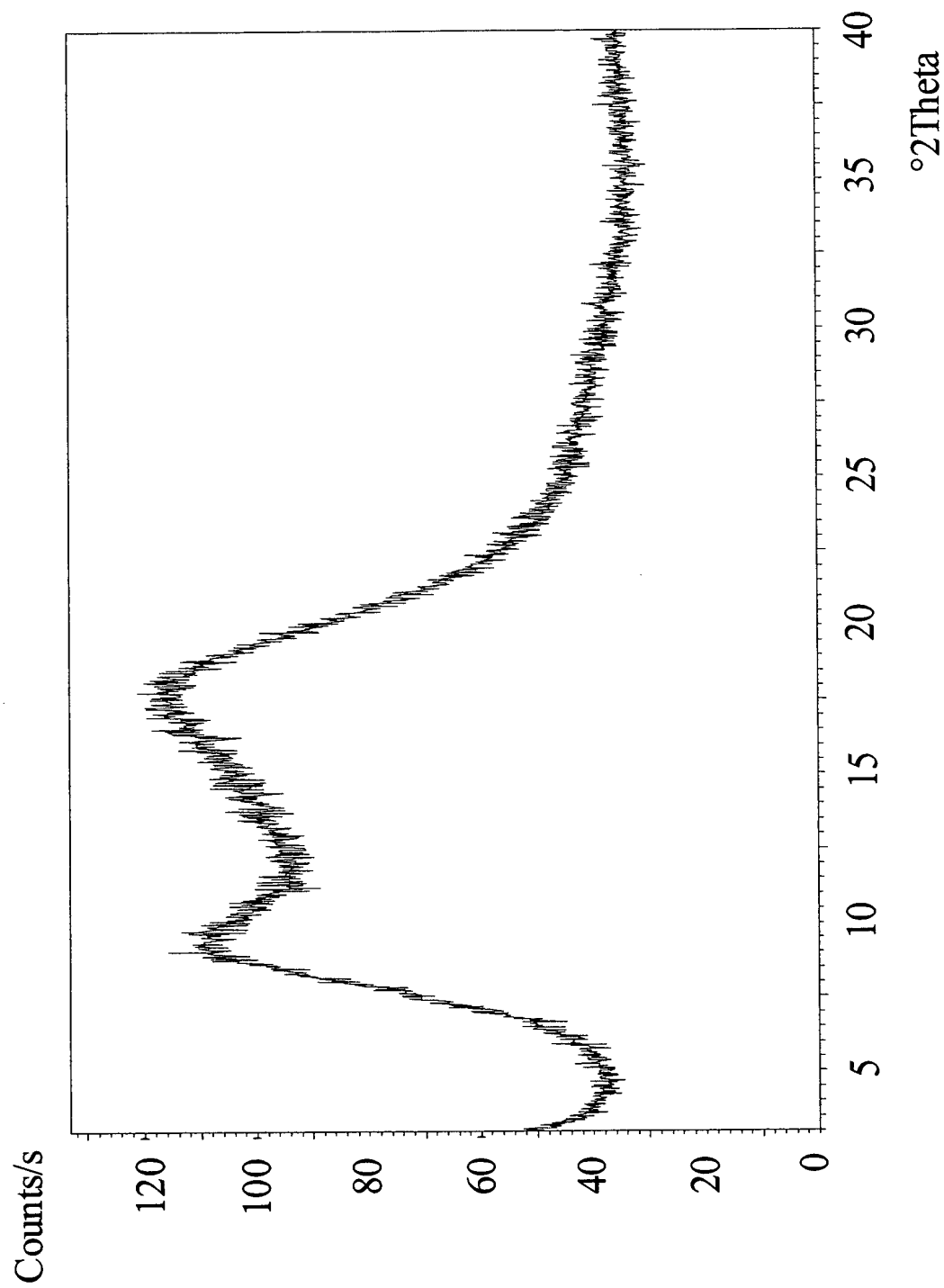


Fig. 6 Powder diffractogram of a novel amorphous 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A, prepared according to the process of Example 11.

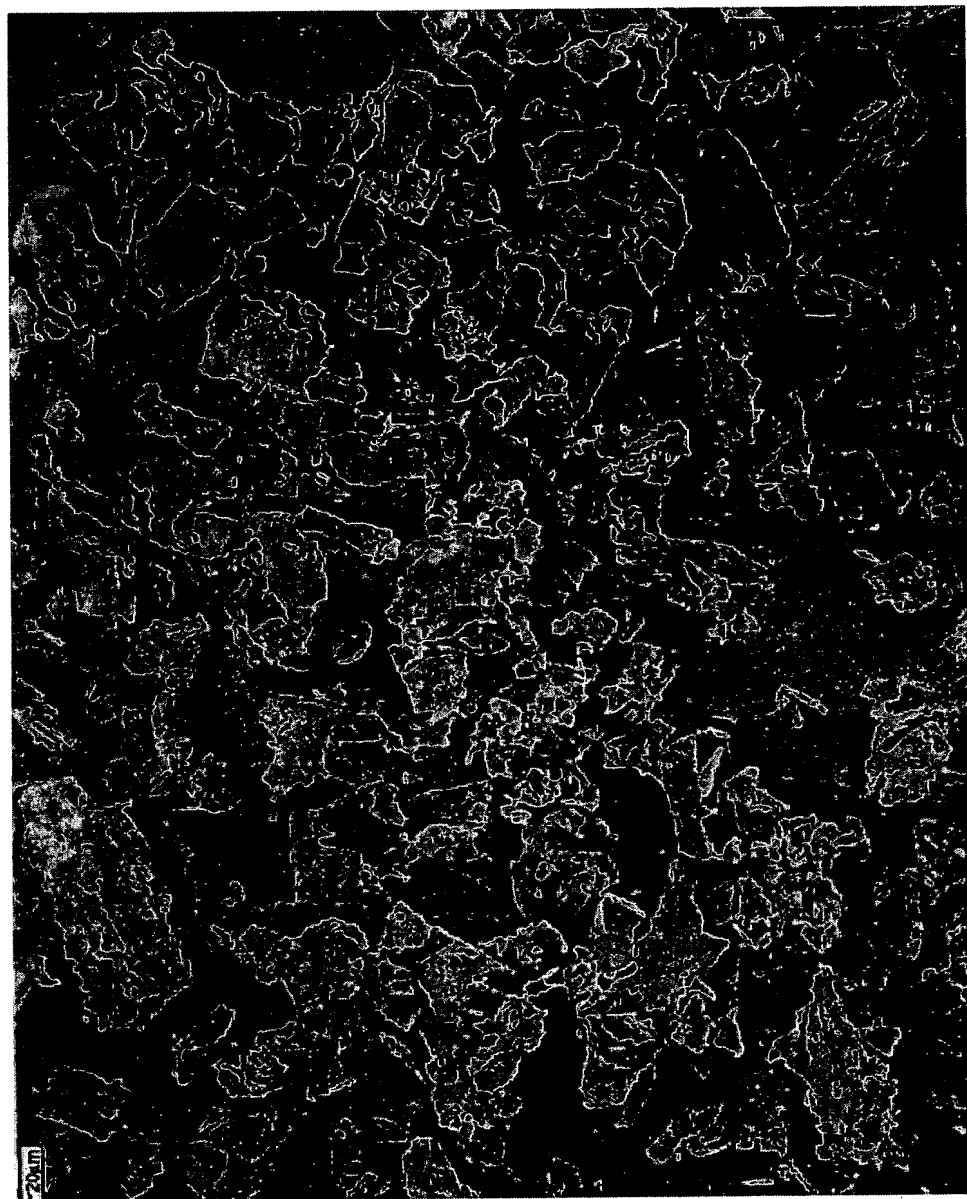


Fig. 7 SEM of the surface of the new amorphous 9-deoxo-9a-aza-9a-methyl-9a-homoerithromycin A prepared according to Example 11.

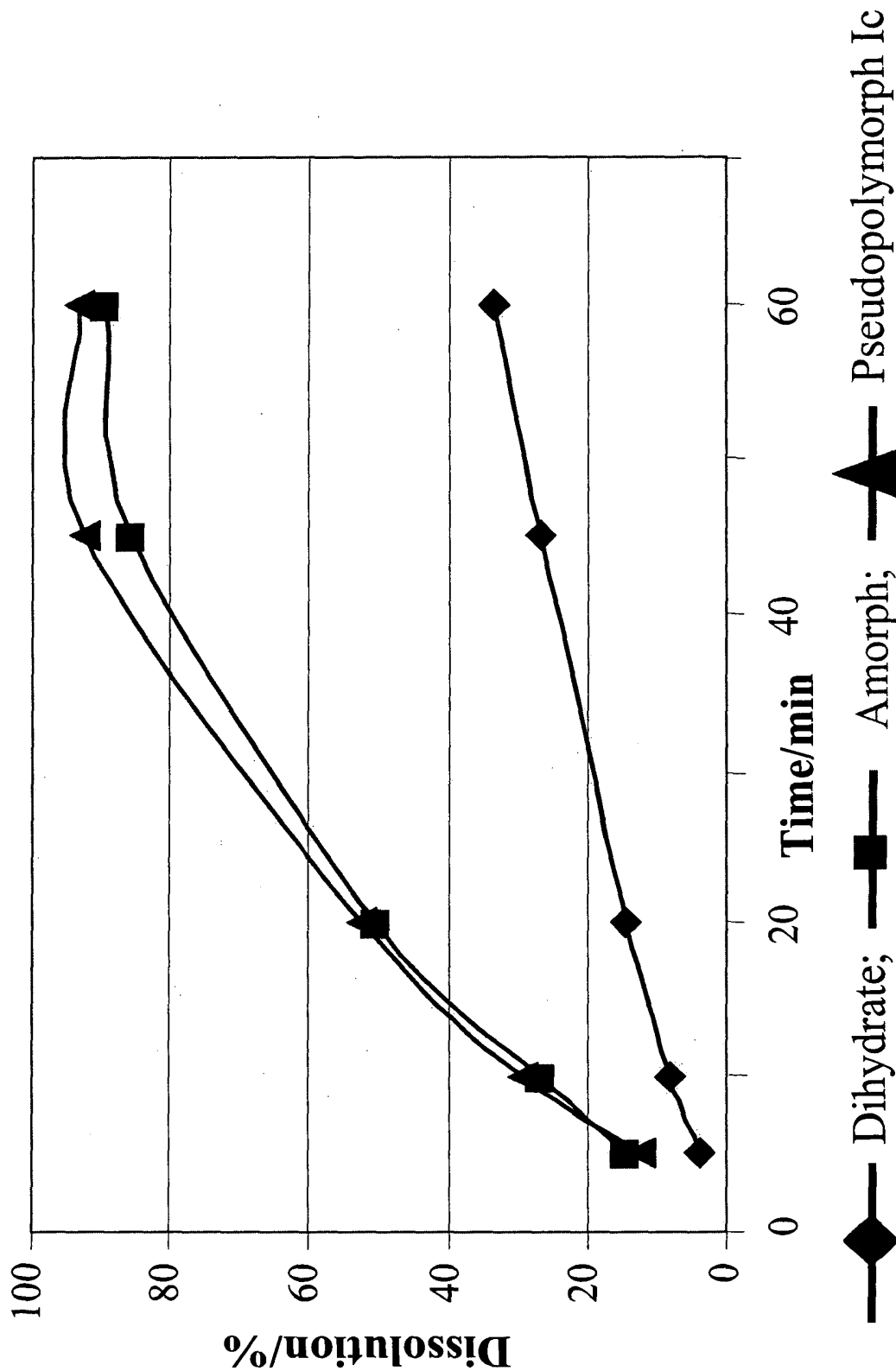


Figure 8: Dissolution rates of a new amorphous 9-deoxy-9a-aza-9a-methyl-9a-homoerithromycin A (Example 11), new isostructural orthorhombic pseudopolymorph of 9-deoxy-9a-aza-9a-methyl-9a-homoerithromycin A of general formula I (Ic: S = MTBE) (Example 3), and commercial 9-deoxy-9a-aza-9a-methyl-9a-homoerithromycin A dihydrate in the medium pH 3 at 37 °C.



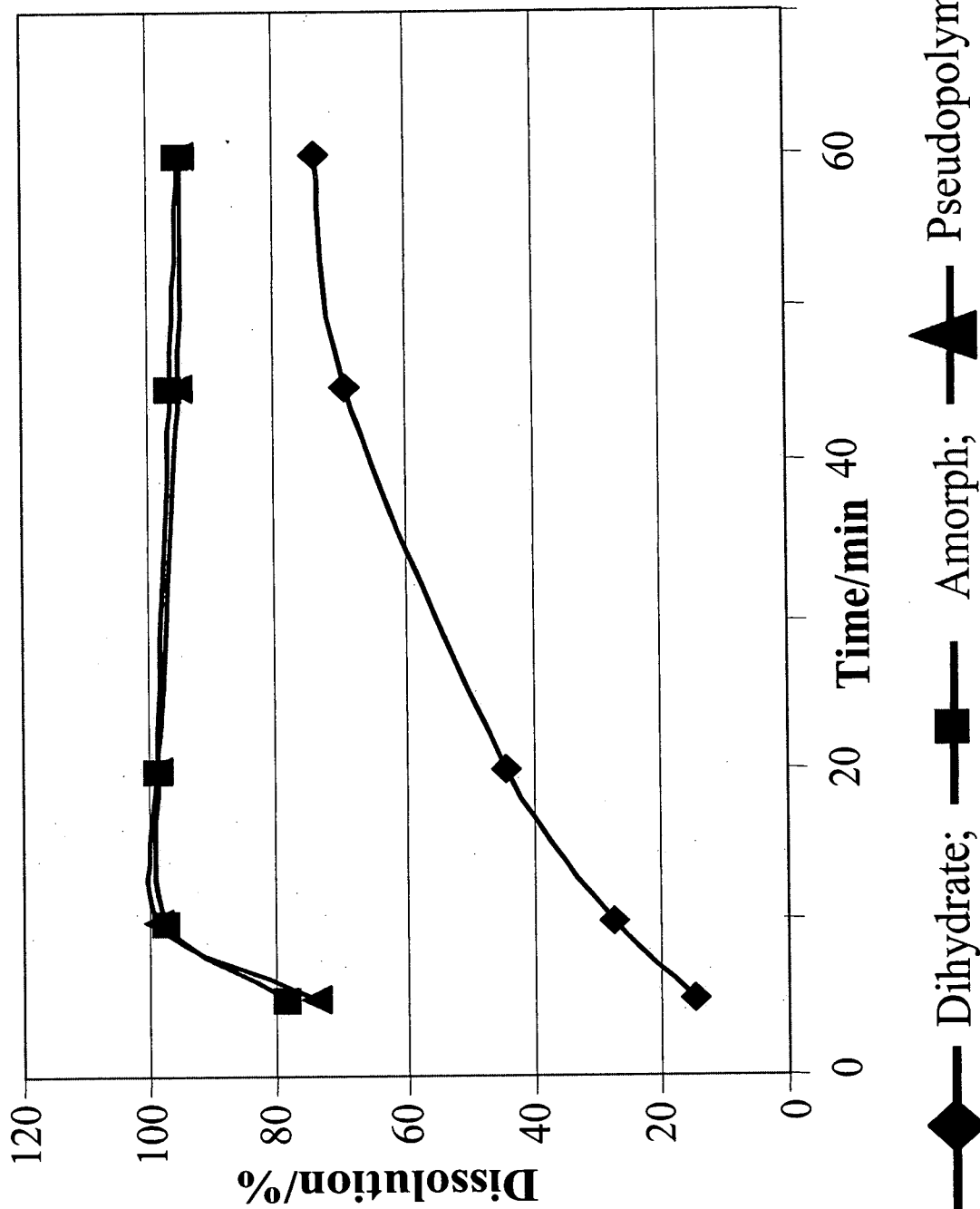


Figure 9: Dissolution rates of a new amorphous 9-deoxo-9a-aza-9a-methyl-9a-homoerithromycin A (Example 11), new isostructural orthorhombic pseudopolymorph of 9-deoxo-9a-aza-9a-methyl-9a-homoerithromycin A of general formula I (Ic: S = MTBE) (Example 3), and commercial 9-deoxo-9a-aza-9a-methyl-9a-homoerithromycin A dihydrate in the medium pH 6 at 37 °C.